

Claims

- [c1] 1. A method of presenting location data representing a mobile phone's current approximate location comprising:
determining the current position of the mobile phone;
looking up locations within a predetermined distance from the current position of the mobile phone; and
displaying a location icon representing a location within the predetermined distance to the current position of the mobile phone.
- [c2] 2. The method of claim 1 further comprising waiting a predetermined period before re-determining the current position of the mobile phone.
- [c3] 3. The method of claim 2 further comprising prompting the user to input the predetermined period.
- [c4] 4. The method of claim 3 further comprising prompting the user to input the predetermined distance from the current position of the mobile phone.
- [c5] 5. The method of claim 4 further comprising determining the distance between the current position of the mobile phone and the underlying location of the location icon.

- [c6] 6. The method of claim 5 further comprising changing the appearance of the location icon based on the distance between the current position of the mobile phone and the underlying location of the location icon such that the location icon appears darker when the current position of the mobile phone is closer to the underlying location of the location icon and lighter when the current position of the mobile phone is further from the underlying location of the location icon.
- [c7] 7. The method of claim 5 further comprising changing the appearance of the location icon based on the distance between the current position of the mobile phone and the underlying location of the location icon such that the location icon appears in a first color when the current position of the mobile phone is closer to the underlying location of the location icon and in a second color when the current position of the mobile phone is further from the underlying location of the location icon.
- [c8] 8. The method of claim 1 further comprising displaying primary data pertaining to the location icon including a distance and heading measurement, wherein the primary data is displayed along with the location icon.
- [c9] 9. The method of claim 8 further comprising accessing

and displaying secondary data pertaining to the location icon that can be displayed on the mobile phone wherein the secondary data pertaining to the location icon includes coordinate data and is accessed by selecting the location icon.

[c10] 10. The method of claim 1 wherein determining the current position of the mobile phone utilizes a Global Positioning System (GPS) system within the mobile phone.

[c11] 11. The method of claim 1 wherein determining the current position of the mobile phone utilizes an Enhanced Observed Time Differential (E-OTD) system within the mobile phone.

[c12] 12. The method of claim 1 wherein determining the current position of the mobile phone utilizes a Time Of Arrival (TOA) system within the mobile phone.

[c13] 13. The method of claim 1 wherein determining the current position of the mobile phone utilizes a Cell Of Origin (COO) system within the mobile phone.

[c14] 14. The method of claim 1 further comprising providing the location icon to a network server such that it can be accessed by other mobile phone users.

[c15] 15. The method of claim 1 wherein location icons and

the underlying coordinates of the location icons are stored in an external location icon database residing on the network wherein the external location icon database is accessible to the mobile phone and contains commercially supplied location icons and location icon coordinates.

[c16] 16. The method of claim 1 wherein location icons and the underlying coordinates of the location icons are stored in an internal location icon database residing in the mobile phone wherein the internal location icon database contains user-defined location icons and location icon coordinates.

[c17] 17. A mobile phone having a software application for presenting location data representing the mobile phone's current approximate location, said mobile phone comprising:
a processor;
a processor readable storage medium;
code recorded in the processor readable storage medium to determine the current position of the mobile phone;
code recorded in the processor readable storage medium to look up locations within a predetermined distance from the current position of the mobile phone; and
code recorded in the processor readable storage medium to display a location icon representing a location within

the predetermined distance to the current position of the mobile phone.

[c18] 18. The mobile phone of claim 17 further comprising: code recorded in the processor readable storage medium to wait a predetermined period before re-determining the current position of the mobile phone.

[c19] 19. The mobile phone of claim 18 further comprising: code recorded in the processor readable storage medium to prompt the user to input the predetermined period.

[c20] 20. The mobile phone of claim 19 further comprising: code recorded in the processor readable storage medium to prompt the user to input the predetermined distance from the current position of the mobile phone.

[c21] 21. The mobile phone of claim 20 further comprising: code recorded in the processor readable storage medium to determine the distance between the current position of the mobile phone and the underlying location of the location icon.

[c22] 22. The mobile phone of claim 21 further comprising: code recorded in the processor readable storage medium to change the appearance of the location icon based on the distance between the current position of the mobile phone and the underlying location of the location icon

such that the location icon appears darker when the current position of the mobile phone is closer to the underlying location of the location icon and lighter when the current position of the mobile phone is further from the underlying location of the location icon.

[c23] 23. The mobile phone of claim 21 further comprising: code recorded in the processor readable storage medium to change the appearance of the location icon based on the distance between the current position of the mobile phone and the underlying location of the location icon such that the location icon appears in a first color when the current position of the mobile phone is closer to the underlying location of the location icon and in a second color when the current position of the mobile phone is further from the underlying location of the location icon.

[c24] 24. The mobile phone of claim 17 further comprising: code recorded in the processor readable storage medium to display primary data pertaining to the location icon including a distance and heading measurement, wherein the primary data is displayed along with the location icon.

[c25] 25. The mobile phone of claim 24 further comprising: code recorded in the processor readable storage medium to access and display secondary data pertaining to the

location icon that can be displayed on the mobile phone wherein the secondary data pertaining to the location icon includes coordinate data and is accessed by selecting the location icon .

[c26] 26. The mobile phone of claim 17 wherein determining the current position of the mobile phone utilizes a Global Positioning System (GPS) system within the mobile phone.

[c27] 27. The mobile phone of claim 17 wherein determining the current position of the mobile phone utilizes an Enhanced Observed Time Differential (E-OTD) system within the mobile phone.

[c28] 28. The mobile phone of claim 17 wherein determining the current position of the mobile phone utilizes a Time Of Arrival (TOA) system within the mobile phone.

[c29] 29. The mobile phone of claim 17 wherein determining the current position of the mobile phone utilizes a Cell Of Origin (COO) system within the mobile phone.

[c30] 30. The mobile phone of claim 17 further comprising: code recorded in the processor readable storage medium to provide the location icon to a network server such that it can be accessed by other mobile phone users.

[c31] 31. The mobile phone of claim 17 wherein location icons and the underlying coordinates of the location icons are stored in an external location icon database residing on the network wherein the external location icon database is accessible to the mobile phone and contains commercially supplied location icons and location icon coordinates.

[c32] 32. The mobile phone of claim 17 wherein location icons and the underlying coordinates of the location icons are stored in an internal location icon database residing in the mobile phone wherein the internal location icon database contains user-defined location icons and location icon coordinates.